

**IN THE CLAIMS**

Please amend claims 8, 13, 29, 68 and 71 to read as follows:

1           Claims 1-7. (Canceled)

1           8.       (Currently amended) A method of providing protection from reactive oxygen  
2 species, the method comprising the steps of:

3               preparing a breathable composition comprising oxygen intentionally supplemented with a  
4 fuel gas comprising at least one hydrocarbon fuel gas;

5               providing said breathable composition to an animal on land while the animal is surrounded  
6 by a gaseous environment; and

7               within said animal, scavenging said reactive oxygen species with said fuel gas.

1           9.       (Original) The method of claim 8, said animal being a human.

1           10.     (Original) The method of claim 8, further comprising providing the animal with the  
2 breathable composition continually for a period of time greater than one hour.

1           11.     (Original) The method of claim 10, further comprising providing the animal with  
2 the breathable composition continually for a period of time greater than one day.

1           12.     (Original) The method of claim 11, further comprising providing the animal with

2 the breathable composition continually for a period of time greater than one month.

1 13. (Currently amended) The method of claim 8, said fuel gas being selected from the  
2 group consisting of hydrogen, methane, ethane, and propane, acetylene, ethene, n-butane,  
3 isobutane, 1-butene, and a combination thereof.

1 Claim 14 (Canceled)

1 15. (Previously Presented) The method of claim 8, said breathable composition being  
2 an explosive composition.

1 16. (Withdrawn) The method of claim 15, further comprising explosion-proofing the  
2 environment where the breathable composition is being provided to prevent ignition of the  
3 breathable composition or exhaled gas.

1 17. (Original) The method of claim 8, the breathable composition being provided at or  
2 near atmospheric pressure.

1 18. (Withdrawn) The method of claim 17, the providing of the breathable composition  
2 being performed using an open circuit apparatus.

1 19. (Withdrawn) The method of claim 8, the providing of the breathable composition

2 being performed using a closed circuit apparatus.

1 20. (Withdrawn) The method of claim 8, the providing of the breathable composition  
2 being performed using a semi-closed circuit apparatus.

1 21. (Withdrawn) The method of claim 8, further comprising the steps of:  
2 filling a first chamber having an open bottom with the breathable composition, said first chamber  
3 being positioned in a second chamber, said breathable composition being lighter than an ambient  
4 air so that said breathable composition is held in said first chamber; and  
5 positioning the animal in the first chamber with the open bottom so that the animal breathes the  
6 breathable composition.

1 22. (Withdrawn) The method of claim 21, further comprising:  
2 explosion-proofing the environment in the first and second chambers.

1 Claim 23 (Canceled)

1 24. (Withdrawn) The method of claim 21, further comprising:  
2 scrubbing an exhaled gas of the first chamber to remove carbon dioxide.

1 25. (Withdrawn) The method of claim 21, said breathable composition comprising at  
2 least 66% hydrogen by volume.

1           26.   (Withdrawn) The method of claim 21, said breathable composition comprising  
2 hydrogen and acetylene.

1           27.   (Withdrawn) The method of claim 21, the breathable composition in the first  
2 chamber having a density less than about 75% of the ambient air.

1           28.   (Withdrawn) The method of claim 8, the step of providing further comprising the  
2 steps of:

3           positioning the animal in a building with a ventilation system; and

4           supplying said fuel gas into the ventilation system to provide the breathable composition  
5 inside the building.

1           29.   (Currently amended) The method of claim 8, wherein ~~the step of providing said~~  
2 ~~breathable composition simultaneously with the step of preparing said breathable composition by~~  
3 ~~supplying~~ said fuel gas is supplied to a respiratory tract of the animal and said oxygen is supplied  
4 from ambient air so that, upon inhalation of the fuel gas and the ambient air, said breathable  
5 composition is prepared and provided to the animal.

1           Claim 30 (Canceled)

1           31.   (Withdrawn) The method of claim 8, further comprised of supplying the breathable

2 composition to the animal via an oral-nasal mask or a helmet.

1 32. (Previously presented) The method of claim 29, further comprised of maintaining  
2 a selected concentration of the fuel gas in the breathable composition by regulating a rate of supply  
3 of said fuel gas to the respiratory tract.

1 33. (Withdrawn) A method of protecting a person from reactive oxygen species, the  
2 method comprising the steps of:  
3 preparing a fuel gas;  
4 providing an animal on land while the animal is surrounded by a gaseous environment with  
5 a nasal delivery system; and  
6 supplying said fuel gas to the animal through said nasal delivery system, so that, upon  
7 inhalation of said fuel gas and ambient air, said fuel gas is provided to the animal with said ambient  
8 air, said nasal delivery system further comprising a supply of a fuel gas, a supply line connected to  
9 said supply of the fuel gas, a flow restrictor mounted in said supply line, said flow restrictor  
10 restricting a flow of the fuel gas, and a valve mounted in said supply line, said valve shutting off the  
11 flow of the fuel gas.

1 Claim 34 (Canceled)

1 35. (Withdrawn) The method of claim 33, with said nasal delivery system being a face  
2 mask.

1           36.     (Withdrawn) The method of claim 33, with said fuel gas being hydrogen.

1           37.     (Withdrawn) The method of claim 33, with said fuel gas being acetylene.

1           38.     (Withdrawn) The method of claim 28, said building comprising:

2           a ducting in the building for providing air to an inside of the building;

3           an explosion-proof blower connected to the ducting and having a return inlet from the  
4 inside of the building;

5           a constant pressure source of said fuel gas;

6           a flow restrictor for restricting the flow of said fuel gas; and

7           a flow diffuser installed in the ducting downstream of the explosion-proof blower.

1           39.     (Withdrawn) The method of claim 38, further comprised of opening a valve  
2 installed between said pressure source and said flow diffuser when said explosion-proof blower is  
3 operating.

1           40.     (Withdrawn) The method of claim 38, said further comprised of:

2           installing a flow sensor in said ducting; and

3           opening a valve installed between said pressure source and said flow diffuser when said  
4 flow sensor detects air flow in the ducting.

1           41.     (Withdrawn) The method of claim 38, said further comprised of:  
2           positioning a fuel-gas sensor inside the building; and  
3           opening a valve installed between said pressure source and said flow diffuser when said  
4           fuel-gas sensor detects a particular level of said fuel gas inside the building.

1           42.     (Withdrawn) The method of claim 38, further comprised of said flow restrictor  
2           allowing a flow rate of said fuel gas achieving a level of said fuel gas inside the house which is  
3           approximately 75% of an explosive limit.

1           43.     (Withdrawn) The method of claim 22, further comprised of said breathable  
2           composition being an explosive composition.

1           44.     (Withdrawn) The method of claim 43, with said breathable composition consisting  
2           essentially of hydrogen, acetylene and oxygen.

1           45.     (Withdrawn) The method of claim 43, with said breathable composition consisting  
2           essentially of hydrogen and oxygen.

1           46.     (Withdrawn) The method of claim 43, with said breathable composition having a  
2           density less than 75% that of air.

1           47.     (Withdrawn) The method of claim 43, with said first chamber further comprising a

2 flexible skirt suspended from a lip defined by the open bottom of the first chamber.

1 48. (Withdrawn) The method of claim 43, wherein said first chamber is further  
2 comprised of an overflow pipe extending from an entry opening above the open bottom of the first  
3 chamber through the top of the first chamber, and said second chamber is further comprised of a  
4 check valve at the top of the overflow pipe, said check valve is located in a region providing  
5 ventilation.

1 49. (Withdrawn) The method of claim 48, further comprising:  
2 positioning an inlet muffler inside the first chamber below the approximate height of a  
3 mouth of the animal in the first chamber;  
4 purifying the breathable composition drawn by the inlet muffler by locating a life support  
5 system outside the first chamber and connecting the life support system to said inlet muffler; and  
6 purifying breathable composition to supplied to the first chamber by installing a muffler  
7 diffuser pipe inside the first chamber and connecting the pipe to the life support system.

1 50. (Withdrawn) The method of claim 49, said life support system further comprising:  
2 a CO<sub>2</sub> scrubber;  
3 a temperature and humidity control;  
4 an oxygen supply supplementing oxygen;  
5 a secondary loop scrubbing nitrogen, argon, oils and other contaminants; and  
6 an alarm system alerting when there is a failure in the system.



1 Claim 51 (Canceled)

1 Claim 52 (Canceled)

1 53 (Withdrawn) The method of claim 43, further comprising:  
2 an antistatic mat on a floor under the first chamber.

1 54. (Withdrawn) The method of claim 30, said delivering means comprising:  
2 an electrolytic cell for electrolyzing water to hydrogen and oxygen, said breathable  
3 composition consisting essentially of said hydrogen and said oxygen produced by said electrolytic  
4 cell;  
5 a supply buffer tank connected to the electrolytic cell for containing said breathable  
6 composition produced by the electrolytic cell;  
7 a dome-loaded regulator connected to the supply buffer tank for supplying the;  
8 a hose connected to the dome-loaded regulator; and  
9 a helmet connected to the hose for supplying the breathable composition to a head of the  
10 animal.

1 55. (Withdrawn) The method of claim 54, said delivering means further comprising:  
2 a return hose connected to the helmet, for allowing said breathable composition to leave the  
3 helmet;

4 a dome-loaded back-pressure regulator connected to the return hose, said dome-loaded  
5 back-pressure regulator controlling the pressure in the helmet to a negative pressure;

6 a return buffer tank connected to said dome-loaded back pressure regulator for smoothing  
7 a flow of said breathable composition through the helmet; and

8 an explosion-proof suction compressor for providing negative pressure to the helmet.

1 56. (Withdrawn) The method of claim 55, said delivering means further comprising:  
2 a first sensing line extending from said helmet to said dome-loaded regulator; and  
3 a second sensing line extending from said helmet to said dome-loaded back-pressure  
4 regulator.

1 57. (Withdrawn) The method of claim 56, said delivering means further comprising:  
2 said suction compressor being designed to produce a negative pressure of approximately 3  
3 PSI.

1 58. (Original) The method of claim 10, further comprising providing the animal with  
2 the breathable composition continually for a period of time greater than 4 hours.

1 59. (Original) The method of claim 10, further comprising providing the animal with  
2 the breathable composition for a cumulative time of greater than 15 hours in one day.

1 60. (Original) The method of claim 10, further comprising providing the animal with

2 the breathable composition for an average of greater than 12 hours a day over 30 consecutive days.

1 61. (Previously Presented) The method of claim 8, further comprising the step of  
2 providing the breathable composition under a hyperbaric condition.

1 62. (Previously Presented) The method of claim 8, with said fuel gas being acetylene.

1 63. (Previously Presented) The method of claim 8, preparing said breathable  
2 composition by delivering ambient air together with said fuel gas.

1 64. (Withdrawn) A method of providing protection from reactive oxygen species, the  
2 method comprising the steps of:

3 electrolyzing water to hydrogen and oxygen by an electrolytic cell; and

4 supplying said oxygen and said hydrogen in a helmet; and

5 positioning a head of the animal in said helmet.

1 65. (Previously Presented) A method of providing protection from reactive oxygen  
2 species, the method comprising the steps of:

3 preparing a breathable composition comprising oxygen intentionally supplemented with  
4 acetylene;

5 providing an animal on land while surrounded by a gaseous environment with said  
6 breathable composition; and

7           within said animal, scavenging said reactive oxygen species with said acetylene.

1           66.     (Previously Presented) The method of claim 65, with said oxygen being supplied  
2     from an ambient air.

1           67.     (Previously Presented) The method of claim 65, with said breathable composition  
2     further intentionally supplemented with a fuel gas.

1           68.     (Currently amended) The method of claim 67, said fuel gas being selected from the  
2     group consisting of hydrogen, methane, ethane, and propane.

1           69.     (Withdrawn) A method of providing protection from reactive oxygen species, the  
2     method comprising the steps of:

3           providing a breathable composition comprising a first fuel gas and an oxygen, said  
4     breathable composition being lighter than an ambient air;

5           filling a first chamber having an open bottom with the breathable composition, said first  
6     chamber being positioned in a second chamber; and

7           positioning an animal in the first chamber with the open bottom so that the animal breathes  
8     the breathable composition.

9           purifying the breathable composition by a life support system, said life support system  
10     comprising a CO<sub>2</sub> scrubber, a temperature and humidity controller, an oxygen supply

11 supplementing oxygen, a secondary loop for scrubbing nitrogen, argon, oils and other  
12 contaminants, and an alarm system for alerting when there is a failure in the system.

1 70. (Previously Presented) The method of claim 8, further comprising the step of  
2 providing the breathable composition under a hypobaric condition.

1 71. (Currently amended) A method of providing protection from reactive oxygen  
2 species, the method comprising the steps of:

3 preparing a breathable composition consisting essentially of ~~oxygen~~ ambient air  
4 intentionally supplemented with hydrogen gas;

5 providing said breathable composition to an animal on land; and

6 within said animal, scavenging said reactive oxygen species with said hydrogen gas.